ILLINOIS COMMERCE COMMISSION

DOCKET 01-0432

REBUTTAL TESTIMONY OF LEONARD M. JONES

OCTOBER 10, 2001

1			I. Introduction and Purpose of Testimony
2	1.	Q.	Please state your name, business address, and present position.
3		A.	Leonard M. Jones, 500 South 27th Street, Decatur, Illinois 62521. I am Director -
4			Business Planning and Forecasting for Illinois Power Company.
5	2.	Q.	Have you previously submitted direct testimony and exhibits in this proceeding?
6		A.	I previously submitted IP Exhibits 6.1 through 6.5.
7	3.	Q.	What is the purpose of your rebuttal testimony?
8		A.	The purpose of my rebuttal testimony is to respond to portions of the direct testimony of
9			Staff witnesses Lazare and Haas, IIEC witnesses Stephens and Phillips, and People of
10			the State of Illinois ("AG")/Citizens Utility Board ("CUB") witnesses Effron and Smith
11			concerning billing determinants, revenue allocation, and rate design issues.
12	4.	Q.	In addition to IP Exhibit 6.6, your prepared rebuttal testimony, are you sponsoring other
13			exhibits?
14		A.	Yes, I am sponsoring IP Exhibits 6.7 through 6.13, which were prepared by me or
15			under my direction and supervision.
			OFFICIAL FILE ILL C. C. DOCKET NO. 0/-0932 TP Exhibit No. 6.6 Witness Date 11/30/01 Reporter 4

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II. Revenue Allocation

- Q. Mr. Lazare proposes to allocate revenue requirement responsibility to each rate class
 strictly based on embedded cost of service. Do you accept his approach?
 A. The approach used in my direct testimony was the approach used in IP's 1999 DST
- case. However, for purposes of this case, the Company is willing to adopt Mr.

 Lazare's approach, and allocate the revenue requirement based solely on cost of service.
- 23 6. Q. Does the Company agree with Mr. Lazare that IP's original proposal was fundamentally flawed?
- A. No. The Company's original proposal uses the same approach that was approved by
 the Commission in the 1999 DST case. The rationale that the Company offered and the
 Commission accepted has not changed. Prices for lighting customers were set based on
 the bundled charge less the energy component included in the bundled rates. This rate
 design allowed customers to choose an alternate energy supplier for lighting based on
 the comparisons to the energy cost embedded in the Company's bundled rate.
- 7. Q. Then why are you accepting Mr. Lazare's approach?
- A. Experience to date indicates that lighting customers that switch to delivery service do so because the lighting account is tied to other, non-lighting service accounts of the customer. Thus, the prices for lighting service have been of little consequence in the customer's decision to elect delivery service. Given the apparent irrelevance of lighting rates in the lighting customer's switching decision, and Mr. Lazare's desire to allocate

37			the revenue requirement based solely on cost of service, the Company has elected to
38			accept Mr. Lazare's revenue allocation approach.
39	8.	Q.	Have you allocated IP's rebuttal revenue requirement to the rate classes based on the
40			revised embedded cost of service study performed in Ms. Althoff's rebuttal testimony?
41		A.	Yes. The results are shown in IP Exhibit 6.7.
42			III. Billing Determinants
43	9.	Q.	Have revisions been made to IP's billing determinants as discussed by Staff witness
44			Lazare at pages 43-44 of his direct testimony and by IIEC witness Phillips at page 18
45			of his direct testimony?
46		A.	Yes. The revised billing determinants are provided in IP Exhibit 6.8.
47	10.	Q.	Please briefly describe the revisions made to the billing determinants.
48		A.	First, revisions were made to residential kWh totals to account for weather
49			normalization of the unbilled sales total. Second, the number of customers apportioned
50			between the low voltage "up to 200 kW" demand metered group and the non-demand
51			metered non-residential group were adjusted to properly reflect the number of
52			customers that qualify for Small Use General Service. Since customers moved from
53			one group to another, the kWh and kW associated with those customers were also
54			moved to the appropriate class. Third, the demand values used for "Demand Charge"
55			inadvertently reflected a 12 month maximum demand rather than 12 individual monthly
56			maximum demands. The correct values are shown in IP Exhibit 6.8.
57	11.	Q.	Have you reviewed AG/CUB witness Effron's testimony regarding the Company's
58			billing determinants?

59		A.	Yes, I have. Mr. Effron recommends the Company's billing determinants be annualized
60			to reflect the end of test year number of customers and an annualized energy sales level
61			based on the end of year number of customers. The Company has made the changes to
62			the residential billing determinants suggested by Mr. Effron using the same procedures
63			he employed. In addition, the Company has made similar adjustments to the billing
64			determinants for the non-residential customer groups. These calculations are show in IP
65			Exhibit 6.9, and are reflected in IP Exhibit 6.8.
66	12.	Q.	Why was the number of residential customers counted in December 2000 lower than
67			the average for the year?
68		A.	Monthly customer counts are based on the number of bills issued in the month.
69			Therefore, monthly customer counts can vary depending on the number of bills issued in
70			the month. In most months, customers are billed once, but in some months, some
71			customers are billed twice, or not at all. Over the course of a year, the customer count
72			evens out to provide an accurate representation of the average for the year.
73			IV. Rate Design
74	13.	Q.	Have you reviewed the discussions of Staff witness Lazare and IIEC witness Phillips
75			regarding the Company's rate design proposal?
76		A.	Yes. Mr. Lazare and Mr. Phillips request some more specific explanation for the
77			Company's proposed rates.

Have you developed a more detailed explanation of the development of the Company's

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proposed rates?

80		A.	Yes. A methodology statement is provided in IP Exhibit 6.10. The methodology
81			statement shows how the Company's rates are based on embedded costs, and how
82			marginal costs are used as a guide in some pricing development. To a large extent, the
83			methodology statement provides a narrative guide to the information provided in the
84			Company's workpapers supplied in response to Staff Data Request AD-01. Further,
85			the Company's approach to developing demand charges is similar to that used in the
86			1999 DST case.
87	15.	Q.	Have the Company's proposed rates changed as a result of changes to the electric
88			distribution revenue requirement presented by other IP witnesses and summarized by
89			Mr. Mortland in his rebuttal testimony?
90		A.	Yes. The proposed rates and resulting revenue presented in this testimony are based on
91			the Company's rebuttal revenue requirement values presented by Mr. Mortland. The
92			proposed rates, and a comparison between present and proposed rates, are shown in
93			IP Exhibit 6.11. It should be noted that, as in other cases, the use of rounded rate
94			numbers means that certain values have to be slightly adjusted to keep rate recovery
95			balanced with the revenue requirement.
96	16.	Q.	Have you considered the testimony of AG/CUB witness Smith concerning the rate
97			design for the residential class?
98		A.	Yes, I have. Ms. Smith proposes to keep the facilities charges for delivery service
99			identical to those in bundled rates, and also proposes that the differential between the

first and second energy block be the same as in current bundled rates. Specifically, Ms.

Smith proposes Facilities Charges of \$6.33, \$8.46, and \$17.00 for multi-family, single

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102 family, and three-phase service, respectively. Further, Ms. Smith proposes a first block 103 delivery charge differential that is 0.8 cents/kWh higher than the tail block delivery 104 charge. Although I can accept Ms. Smith's approach in concept for purpose of this 105 case, there are two implementation issues. First, Ms. Smith's proposed Facilities 106 Charges are equal to existing SC 2 Facilities Charges. However, on May 1, 2002, 107 residential rates will be reduced by another 5% (from the rates in effect in December, 108 1997). The Facilities Charges that will be in effect on May 1, 2002, for SC 2 will be 109 \$5.96, \$7.96, and \$16.00 for multi-family, single family, and three-phase service, 110 respectively. Second, Ms. Smith proposes to use 0.8 cents/kWh to differentiate the 111 first block delivery charge from the tail block delivery charge. However, 0.8 cents/kWh 112 is the summer season price differential that will be in effect for SC 2 on May 1, 2002. 113 The winter season price differential will be 1.76 cents/kWh. The load weighted (by 114 seasonal kWh usage) differential is 1.4 cents/kWh. Thus, using Ms. Smith's 115 methodology for pricing residential service, the Facilities Charges for SC 2 and the 116 load-weighted summer and winter per kWh first block price differential in effect on May 117 1, 2002 should be used. 118 17. Q. How do Ms. Smith's proposed prices compare to the values generated by the 119 Company's cost based rate design approach? 120 A. A comparison of the Facilities Charges may be found in IP Exhibit 6.10 (Schedule 2, 121 item 1, page 5). The single family Facilities Charge from SC 2 (on 5/1/2002) is very 122 close to the cost of service (\$7.96 price vs. \$8.25 cost), while the multi-family Facilities

Charge is well below cost of service (\$5.96 price vs. \$7.13 cost) and the three-phase

124			Facilities Charge is above cost of service (\$16.00 price vs. \$13.34 cost). Using the
125			Company's rate design methodology outlined in IP Exhibit 6.10 (Schedule 2, item 3,
126			page 7), the first block delivery charge would have been 0.9 cents/kWh higher than the
127			tail block. Again, the Company's rate design methodology would have generated results
128			close to the methodology proposed by Ms. Smith.
129	18.	Q.	What do you conclude regarding Ms. Smith's proposed residential rate design
130			methodology?
131		A.	Given that delivery service will be a new experience for residential customers, Ms.
132			Smith argues that greater weight should be given to maintaining continuity between
133			bundled and delivery service rates, which would contribute to simplicity and customer
134			understanding (AG/CUB Ex. 1, p. 12). While her approach differs from the
135			Company's proposal, the results are reasonably close. Therefore, the Company will use
136			Ms. Smith's residential rate design approach, modified to adjust Facilities Charges for
137			the additional 5% rate decrease to become effective on May 1, 2002, and to adjust the
138			first block delivery charge differential to match the combined load-weighted
139			summer/winter first block energy charge differential in SC 2 under the rates to be in
140			effect May 1, 2002. Movement to fully cost based rates may be made in subsequent
141			proceedings after evaluating customer reaction to the initial delivery service rates.
142	19.	Q.	How does the AG/CUB residential rate design proposal compare to the proposal
143			offered by Staff witness Lazare?
144		A.	Mr. Lazare also proposed to use the existing facilities charges for bundled SC 2 as the
145			starting point. However, Mr. Lazare proposes to use a flat energy charge to recover

the remaining allocated revenue requirement in order to send consumers in higher usage brackets a price signal to conserve energy. He states that "The higher rate applying to higher usage levels would encourage these customers to reduce wasteful consumption; thereby mitigating upward pressure on power prices and benefiting the environment accordingly." (Staff Exhibit 5.0, p. 39).

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AG/CUB witness Smith (AG/CUB Ex. 1, p. 12) also states that the 300 kWh block will give customers less incentive to conserve usage. Is encouraging conservation an appropriate rate design objective for delivery service rates at this time?

I question whether encouraging conservation in electricity use should be a consideration in setting rates of a delivery services provider that does not supply energy. Putting that aside, however, price signals sent to consumers should reflect the cost of providing the service to the consumer. One of the consequences of establishing cost-based prices is that, if unit costs increase as one serves additional customer load, the unit price will likewise increase, giving customers an incentive to conserve energy. In the example provided by Mr. Lazare, he indicated that it is reasonable to assume that a customer using 3,000 kWh per month would require larger secondary facilities than a customer using 300 kWh per month. (Staff Exhibit 5.0, p. 38) While it costs more in total dollars to serve a larger residential customer than a smaller customer, doing so is cheaper on a cents/kWh basis. For example, IP Exhibit 6.12 shows that for secondary level systems, it costs \$27/year to serve each customer who uses only 300 kWh per month served off that circuit. For customers that use 3,000 kWh per month, the secondary level systems necessary to serve each customer cost \$29/year. For the 300 kWh per month

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customer, this equates to over 1.4 cents/kWh, while for the 3,000 kWh per month customer, this only amounts to 0.2 cents/kWh. Thus, as customers with a typical load pattern increase in size, secondary voltage level systems needed to serve the customer decrease in cost per kWh. This also demonstrates that a declining block rate is appropriate, and that a flat delivery rate per kWh would provide a subsidy from the larger residential customer to the smaller residential customer. The same is true for Small Use General Service Customers. The example in IP Exhibit 6.12 shows that it typically costs more in absolute dollars to serve a larger customer. Why then has the Company proposed to recover all secondary costs in the first 300 kWh delivery charge? First, secondary facilities are installed as a function of the number of customers and expected demand on the facilities. IP Exhibit 6.12 indicates that the secondary system cost is heavily weighted toward a function of the customer being connected to the Company's system. As such, the cost may be best recovered through a fixed facilities charge. The demand or usage sensitive portion of the cost is relatively small. In effect, the incremental cost of secondary service to larger customers is only 0.08cents/kWh [(\$78.73 - \$52.01)/(36,000kWh-3,600kWh) = 0.08cents/kWh]. Second, 99% of the Company's residential customers use less than 3,000 kWh per month. Nearly 80% of the Company's residential customers use less than 1,150 kWh per month, and 50% of residential customers use less than 650 kWh per month. The embedded cost of the facilities was incurred to serve all of the Company's residential customers, and as such

are heavily weighted toward facilities that are designed to serve an average (smaller)

190 customer. While the 1% of secondary facilities constructed to serve customers using 191 3,000 kWh per month or more are indeed included in the average, the 20% of 192 customers who do not use 300 kWh per month are likewise included. Thus, on 193 balance, the Company's proposal is reasonable and equitable to all customers. Next, in 194 a rate class with over 500,000 customers, there are bound to be situations where the 195 rate design does not seem adequate to properly recover a particular customer's cost of 196 service. For instance, the Company serves customers in both urban and rural areas, 197 and with overhead service and underground service. In the interest of rate simplicity, 198 the Company has not addressed cost of service differences arising from urban vs. rural 199 locations and overhead vs. underground service in rate design. Similarly, recovering the 200 secondary voltage system costs in the first block delivery charge is fair for the vast 201 majority of the Company's customers. Finally, not all customers use 300 kWh per 202 month. Only approximately 80% of residential customers consistently use more than 203 300 kWh per month. Thus, some smaller customers do not fully pay for secondary 204 facilities that serve them. 205 22. Q. Has the Company considered IIEC witness Stephens' complaint that the shifting of 206 revenue responsibility from lower voltage customers to higher voltage customers has 207 increased rates to the high voltage customers too much? 208 A. Yes. The Company's proposal in direct testimony based the non-residential facilities 209 charges on the total embedded customer cost methodology as outlined in IP Exhibit 210 6.10. In order to mitigate some of the rate impact of moving prices to cost of service

immediately, the Company is now proposing to move the price of the combined facilities

212 and metering charge one-half of the way between the current delivery service price and 213 the cost of service. The adjustment created in this step will be applied to the Facilities 214 Charge. The metering charge will be set equal to cost of service, since this is an 215 unbundled service that may be provided by others. This approach will also increase the 216 revenue recovery from the lower voltage customers as compared to IP's original 217 proposal, thereby allowing for a lower charge to higher voltage customers. The 218 mechanics of the Company's proposal are outlined in IP Exhibit 6.10. 219 23. Q. With the adjustment to Facilities Charges described above, what is the Company's rate 220 design proposal for Small Use General Service metered customers? 221 A. The Company proposes Facilities Charges of \$8.03 and \$11.09 for single and three-222 phase service, respectively. Further, the Company proposes Metering Charges of 223 \$3.35 and \$7.78 based on the unbundled metering ECOSS results provided by IP 224 witness Althoff in her rebuttal testimony and the methodology outlined in IP Exhibit 225 6.10. The Delivery Charge maintains a first block of 300 kWh priced higher than the 226 tail block for the reasons discussed above for the residential class. Secondary system 227 costs form the basis for the rate differential, and the development of the charge is shown

231 24. Q. Do you have any comments on Mr. Lazare's criticism of the Company's proposed delivery charge for unmetered customers?

IP Exhibit 6.10 (Schedule 2, item 3, page 7).

in IP Exhibit 6.10 (Schedule 2, item 3, page 7). The total Delivery Charge has been

reduced by an amount of the subsidy created by the higher facilities charge as show in

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233		A.	Mr. Lazare criticized the Company's rate design for unmetered service because the
234			delivery charge increased by 723% from \$0.0014 to \$0.01152 cents/kWh. However,
235			Mr. Lazare is proposing an 1176% increase, from \$0.0014 to \$0.01787 per kWh for
236			this rate element. The Company's proposal simply keeps the unmetered service
237			Facilities Charge at the existing delivery service level, and recovers the remaining
238			allocated revenue requirement through the Delivery Charge.
239	25.	Q.	What impact did limiting the Facilities Charge movement as described above have or
240			the calculation of demand charges for non-residential Demand Metered customers?
241		A.	The Facilities Charge methodology increases revenue recovered over the level of cost
242			of service, which provides a subsidy from the customer cost to the demand cost
243			category. The Facilities Charge subsidy was shared among each voltage level of service
244			according to each voltage level's demand related cost of service relative to the total.
245			The methodology is shown on IP Exhibit 6.10, Schedule 2, item 3, page 1. In short, the
246			Facilities Charge subsidy reduces the demand charges for all customers (including higher
247			voltage customers). The Company's proposed rates are shown in IP Exhibit 6.11 and
248			the methodology used to develop the rates is described in IP Exhibit 6.10.
249	26.	Q.	In addition to the Facilities Charge impact described above, have you changed the
250			demand charge development methodology from the Company's direct case filing?
251		A.	Yes. In addition to the Facilities Charge change described above, the Company has
252			also refined its approach as to how other demand cost offsets were apportioned to the
253			various voltage levels. As shown in IP Exhibit 6.10 (Schedule 2, item 3, page 1),
254			Transformation Charge revenue and miscellaneous revenue also provide some cost

offsets. In the Company's direct case, demand prices were created by applying the entire Transformation Charge revenue offset to the primary voltage demand cost. The Company now proposes to apportion the revenue offset according to the ratio of the transformation demand at each voltage level to the total transformation demand. The revised approach recognizes that customers who do not use the primary voltage system also pay a Transformation Charge.

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Similarly, in the Company's direct case, miscellaneous revenue provided a demand cost offset based on the ratio of the ECOS demand at each voltage level to the total ECOS demand. The majority of miscellaneous revenue collected from demand metered customers is for rental service of equipment (e.g., transformers and substations) and as such, should provide a cost offset to the voltage costs at the voltage level where the customer takes service. Rental service costs that were directly identified with a customer were credited to the appropriate voltage cost where the customer takes service. The costs that were not directly identified with a customer were allocated based on the ratio of the ECOS demand at each voltage level to the total ECOS demand. All of these steps have the impact of reducing demand charges for higher voltage customers.

What are the proposed revenue increases for the three demand metered customer categories shown on IP Exhibit 6.8?

The revenue increase for customers up to 200 kW would be 39%; the revenue increase for customers with demands from 200 - 1,000 kW would be 36%; the revenue increase for customers over 1,000 kW would be 39%.

277	28.	Q.	What are the rate impacts of the Company's rebuttal rate design for customers over 5
278			MW?

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Using the examples provided by IIEC witness Stephens (at page 8 of his direct testimony), the percent revenue increases to customers at various voltage levels is as follows: 12.47 kV and below: 16%; 34.5 kV to 69 kV: 55%; 138 kV and above: 75%. The increases on a per kWh basis are 0.066 cents/kWh, 0.048 cents/kWh, and 0.065 cents/kWh, respectively.

Further, contrary to Mr. Stephen's assertion, most customers over 1 MW would pay a Transition Charge ("TC") if they switched from bundled service today. Of the customers still served under bundled rates, all SC 21 and SC 24 customers, if eligible to switch, would pay a TC if they switched by the end of October. The simple average TC for SC 21 customers is approximately 2.25 cents/kWh and nearly 1.0 cent/kWh for SC 24 customers. Thus, to the extent that these customers were to switch to delivery service, the delivery service rate design impact will be absorbed by the customer's transition charge. In other words, the impact of the delivery service rate change will not be felt by the customer, or the Company, in terms of total revenue paid and collected. Further, if a customer does not have a TC, this is because the customer's bundled service rate is near or below the cost the customer would incur for power in the competitive market, plus delivery services (i.e., what the competitive market could offer the customer).

- 297 29. Q. Mr. Stephens and Mr. Lazare both request additional support for the Company's
 298 proposed Reactive Demand Charge. What support does the Company have for its
 299 proposed \$0.20/kVAR charge?
- 300 A. The basis for the proposed charge is presented in IP Exhibit 6.10 (Schedule 2, item 5). 301 The charge is based on the cost of installing new capacitor banks, plus applicable 302 expenses. Use of the cost of a newly installed capacitor bank appropriately reflects the 303 economic decision that customers face - either take steps to minimize kVAR demand 304 or pay the Company's Reactive Demand Charge. Further, customers are free to install 305 their own capacitors to reduce kVAR's measured by the Company's meter. For 306 customers that own their own generation facilities, VAR's may be produced by the 307 generation facilities which would also offset kVAR's measured by the Company's 308 meter. Additionally, an increase in this charge serves to reduce the demand costs 309 recovered in other demand charges for customers over 1 MW. IP Exhibit 6.10 310 (Schedule 2, Item 3, Page 6). Thus, customers with better power factors benefit from 311 overall lower rates. Further, the current bundled service Reactive Demand Charge is 312 \$0.30/kVAR. Thus, as customers move from bundled rates to delivery services, they 313 will still see a decrease in the price paid for this component of service.
- 314 30. Q. Similarly, Mr. Stephens and Mr. Lazare also both request additional support for the
 Company's proposed Transformation Capacity Charge. What support does the
 Company have for its proposed \$0.50/kW charge for customers under 3 MW and
 \$0.75/kW for customers 3 MW and over?

318		A.	The basis for the proposed charge is presented in IP Exhibit 6.10 (Schedule 2, item 4).
319			The charge is based on the cost of installing new transformers, plus applicable
320			expenses. Use of the cost of a newly installed transformer appropriately reflects the
321			economic decision that customers face - have power transformed by the Company, or
322			provide their own transformation, through ownership or lease of facilities. Customers
323			are free to install their own transformers to transform power from the customer's supply
324			voltage to the voltage needed by the customer. Further, revenue collected from
325			Transformation Charges serves to reduce the demand costs recovered in other demand
326			charges for all demand metered customers. Thus, customers who rent or own their
327			transformation facilities do not pay for the service twice, and benefit from lower demand
328			rates. Further, the current bundled service Transformation Capacity Charge is
329			\$0.75/kW. As customers move from bundled rates to delivery service, they see a
330			decrease in price paid for this service if under 3 MW, or pay the same price if 3 MW or
331			larger.
332	31.	Q.	Mr. Stephens questions the price differential in the Transformation Charge for
333			customers above and below 3 MW. Do you have any response?
334		A.	Yes. First, IP witness Voiles explains the history behind the Transformation Charge for
335			customers 3 MW and above. I also note that of 73 IP customers larger than 3 MW,
336			57 already own or rent their transformation facilities. Thus the charge would apply at
337			most to 16 customers. Moreover, the \$0.75/kW Transformation Charge for customers
338			over 3 MW is within the range of costs of recently installed facilities, as shown in IP

Exhibit 6.10 (Schedule 2, item 4). Customers 3 MW and over have demonstrated a

willingness to either rent or own their transformation facilities. If the rate for customers
above 3 MW is set too low (any amount below \$0.75/kW) other customers will
eventually pay the cost to serve via higher demand charges as customers requiring
expensive transformation facilities take the cheaper Transformation Charge, leaving the
remaining cost of serving the customer to be shared by all other customers. Further,
customers over 3 MW typically require substations to transform their power.
Substation costs can vary considerably from customer to customer. One customer may
desire additional fault protection equipment, while another may not. One customer's
transformation facility may need to be placed on a concrete pad secured with a fence,
while another customer's facilities may be pole mounted. Such customer preferences
and circumstances can cause cost differences. For this reason, the Company would
prefer to require customers 3 MW and over to rent or own their transformation
facilities. However, for reasons explained by Ms. Voiles, the Company currently has in
place a \$0.75/kW Transformation Charge for customers 3 MW and over.
Could the Transformation Charge be based on embedded costs, as Mr. Stephens
proposes?
No. The Company's property accounting system does not provide sufficient detail to
determine if a transformer or substation is connected directly to a customer's delivery
point or not. Accordingly, incremental cost pricing for this service is the most practical
(and reliable) approach, and is consistent with the method used to set these rates in the

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1999 DST case.

36. Mr. Lazare takes issue with the Company's proposal to establish a Distribution

Capacity Charge for demand metered customers, based on the customer's maximum

demand experienced in the past 12 months. Specifically, Mr. Lazare states:

While use of the 12 month peak magnifies the importance of the customer's peak as a signal to control demands, it diminishes the need to control monthly peak demands, which have no effect on the Distribution Capacity Charge as long as they remain below the 12 month peak. (Staff Exhibit 5.0, p. 31)

Please respond.

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First, Mr. Lazare is correct that basing charges on Distribution Capacity magnifies the importance of the customer's peak demand as the basis for a signal to control demands. Indeed, cost of service studies (including the one used in this proceeding) use a noncoincident peak demand for the year to allocate distribution costs. This method recognizes that it is the annual peak demand that drives distribution investment. Use of Distribution Capacity, rather than the customer's monthly peak demands, better follows the manner in which costs were incurred (and assigned). Next, while there is an emphasis on the customer's annual peak, customers still have an incentive to keep peak demands in other months low. Twelve months following the customer's setting of a peak demand, the customer's next highest demand will become the new Distribution Capacity. Customers still have an incentive to pay attention to their demand to set a lower demand for the future. Third, one year from now, a customer may have the same amount of demand as it has today. Monthly demands are of little consequence once the maximum demand for a distribution circuit is set. The equipment in that circuit will still need to serve the expected maximum demand. What matters more than monthly peaks

is the maximum potential for the peak. Fourth, use of the Distribution Capacity as the basis for a Distribution Capacity Charge ensures that higher load factor customers do not subsidize lower load factor customers. If the Distribution Capacity were discarded in favor of the monthly maximum demand, the unit rate would increase. Under the Company's cost based rate design methodology shown in IP Exhibit 6.10, using the smaller maximum monthly demand would increase the unit rate. Thus, a high load factor customer would likely pay more under Mr. Lazare's method than the low load factor customer.

A simple example illustrates this point. Assume two customers are on the same circuit. The first customer has a peak demand of 2 MW around the clock (100% load factor). The other customer also has a peak demand of 2 MW, but in 11 months of the year, only 500 kW is used. Thus, for the circuit, a total deliverability of 4 MW is needed. Further assume that the annual revenue requirement is \$100,000 for the distribution system. Under the Distribution Capacity approach, each customer would pay the Company the same amount for delivery service, or \$50,000 (ignoring for the moment the Demand Charge). This is appropriate since each customer contributed equally to the need for the Company to install 4 MW of distribution capacity. Under Mr. Lazare's approach of using monthly maximum demand, the high load factor customer would pay \$76,190 per year while the second customer would only pay \$23,810. The result is that customer 1 provides a subsidy to customer 2, and that customer 1 would now have an incentive to reduce demand to lower the total cost burden, while customer 2 has less of an incentive to control his annual peak demand. In

407			fact, under Mr. Lazare's maximum monthly demand approach, customer 2's maximum
408			annual demand would have to reach 18,500 kW before customer 2's payment to the
409			Company equaled that paid by customer 1. Of course, at this demand level, total circuit
410			system demand would be 20,500 kW and customer 1 would be contributing less than
411			10% to the circuit peak demand. See IP Ex. 6.13.
412	34.	Q.	Mr. Lazare also mentions that the Commission has recently moved away from ratchet
413			demand rates, citing a ComEd and an Ameren case. How do these cases differ from
414			what the Company is proposing?
415		A.	In both cases, the utilities appeared to be proposing to recover the entire delivery
416			service charge through rates that were subject to a demand ratchet. IP is proposing
417			only to recover the cost of local primary and secondary voltage systems through the
418			Distribution Capacity Charge. Customers that pay the Distribution Capacity Charge are
419			also subject to the Demand Charge, which is based on the customer's monthly
420			maximum demand. Thus, customers still have an immediate incentive to monitor their
421			monthly maximum demands. Further, the proposed SC110 Distribution Capacity
422			Charge is similar to the Distribution Capacity Charge in existing bundled rates for
423			demand metered customers.
424			V. Standby Capacity Requirement
425	35.	Q.	Have your reviewed IIEC witness Stephens' and Staff witness Haas' testimony
426			regarding the Company's proposed standby capacity requirement?
427		A.	Yes. Mr. Stephens and Mr. Haas both object to the tariff provision that specifies that if
428			a self-generation customer using delivery services for stand-by exceeds its standby

capacity, the customer will then be charged an amount equal to three times the
otherwise applicable demand charges for the excess demand. Both witnesses also
object to use of billing determinants that they contend differ from those used for all other
customers.

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36. Q. How do you respond to the criticisms of the charges applicable when a self-generation customer exceeds its standby contract amount?

Under IP's proposal, if a customer exceeds the standby contract capacity in any amount, the customer would be billed 3 times the otherwise applicable demand charges for the excess demand. The Company proposed this provision to give customers an incentive to choose the level of standby capacity that fits their particular situation. Without the provision, the Company believes that customers would have an incentive to choose a standby capacity value that is lower than what their actual delivery service needs would be if their self-generation facilities went off-line. However, given the difficulty in predicting exactly the appropriate standby capacity level, the Company now proposes that as long as the customer's demand does not exceed the standby capacity value by more than 10%, the three times charge will not apply. However, if the customer's actual demand exceeds the standby capacity, the standby capacity will still be reset to equal the customer's new actual demand. Further, if a new standby capacity value is established, the company will review the customer's standby capacity requirement after 12 months, based on the customer's demands in the intervening period and its connected load, to determine if the customer's standby requirement should be lowered.

451 37. Q. How do you respond to the argument that standby customers are being treated differently (i.e., use of different billing determinants) than other customers?

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These customers have different billing determinants because they operate differently than other customers. As stated in my direct testimony, in the absence of the standby capacity requirement, the customer would receive standby service for his full load, but only pay for a portion of the cost. The standby capacity requirement helps ensure that other customers do not subsidize the delivery service standby customer. Is essence, the standby capacity requirement is like an insurance payment and requires self-generation customers to pay for the delivery service that they are receiving. Whether or not the delivery service system was actually used by the customer to provide energy to its facilities, the insurance was still provided.

What about the fact that the non-self-generation customer is billed for delivery service based on a non-ratcheted demand, while the self-generation customer is billed based on a ratcheted demand?

For billing determinants that use the customer's twelve-month maximum demand, billing determinants established using the customer's standby contract capacity and those using the customer's Distribution Capacity will likely be similar. The customers with self-generation on the Company's system appear to have established their maximum distribution system peak in the past 12 months. Thus, for those customers, their standby capacity and their Distribution Capacity may be identical. However, for billing determinants that otherwise would use the monthly maximum demand (i.e., Demand Charge) if the customer did not have generation, the standby customer would pay more

473 for Delivery Service. To address this issue, the Company now proposes to use the self-474 generation customer's standby capacity multiplied by a load diversity factor to adjust 475 the customer's standby capacity to approximate a monthly maximum demand. Use of a 476 diversity factor is consistent with the approach used in the Company's SC 22, Standby 477 Service, and effectively converts the customer's standby capacity to a billing 478 determinant that is more representative of the monthly maximum demand. The 479 adjustment will only apply to the customer's billing determinants used for the Demand 480 Charge. 481 39. Q. Please describe how the load diversity factors were developed. 482 A. The factors were taken from the load profile workpapers associated with Rider TC. 483 For higher load factor customers, information from profile 601 (SC 24) will be used. 484

The factors were taken from the load profile workpapers associated with Rider TC. For higher load factor customers, information from profile 601 (SC 24) will be used. For other large customers (over 1 MW), profile 501 (SC 21) will be used. For customers under 1 MW, profile 407 (SC 19 - miscellaneous) will be used. The resulting diversity factors were developed by taking the average of the monthly maximum demands divided by the maximum annual demand. The diversity factors are 85%, 80%, and 75%, respectively. These factors have been applied to the Standby Capacity Requirement for purposes of calculating the customer demand charges reflected in IP Ex. 6.8.

491 40. Q. How will you determine which load diversity factor applies to a customer?

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A. The determination will be based on an estimate of the customer's load factor assuming that the customer's generation were idle for the year. Customers with a 50% or better

194			load factor will fall under the SC 24 diversity factor, while customers with lower load
195			factors will have the SC 21 diversity factor applied.
196	41.	Q.	Mr. Haas appears to oppose use of the standby capacity requirement even for
197 [.]			establishing the billing determinant for the Transformation Capacity charge. What is
198			your response?
199		A.	I disagree with Mr. Haas on this point. At a minimum, the standby capacity requirement
500			should apply fully to the Transformation Capacity Charge in SC 110, section 6.C(5).
501			Customer transformers or substations must be sized to serve the customer's maximum
502			expected demand at any single moment. Use of a twelve month maximum demand may
603			not appropriately reflect the self-generation customer's expected maximum demand that
504			could be placed on the delivery system. The standby capacity requirement provides the
505			appropriate basis to bill for the Transformation Capacity Charge.
506	42.	Q.	Mr. Haas also states that IP has failed to consider load diversity among self-generation
507			customers and their benefits provided to the delivery system. Please comment.
808		A.	Mr. Haas believes that it is unreasonable to make standby customers responsible for
509			paying for the amount of potential usage that the customer would be drawing from the
10			grid if self-generation did not exist. Mr. Haas also provides an example of 100
511			customers who install on-site generation to serve a portion of their load, in order to
12			demonstrate that these are diversity benefits of having many self-generation customers
13			connected to the delivery grid. Mr. Haas may not be familiar with the IP system and the
14			number of self-generation customers connected to the grid. At this time, IP only has 9
15			self-generation customers, spread across its system of nearly 800 distribution circuits,

516 so these customers would not provide any load diversity benefits. The self-generation customer places the same planning burden on the Company as do other customers. 517 518 The level of investment in distribution facilities to provide, or be prepared to provide, 519 delivery service to these customers is the same. It would be irresponsible for 520 distribution planners to assume that a customer's generation facility would be running at 521 the time of the local circuit peak. If the planners were to do so, they would do so at the 522 risk of a degradation in reliability. 523 43. Q. Mr. Haas believes that IP has proposed the standby capacity requirement as a means to 524 mitigate the risk of revenue lost to the Company or an affiliate due to additional 525 proliferation of self-generation (Staff Exhibit 9.0, p 6-7). Please comment. 526 A. The Company proposed the standby contract requirement in order to recover the 527 Company's distribution system costs of backing up the load that is served by a 528 customer's self-generation equipment, but that is not isolated from the Company's 529 distribution system. As it stands today, the Company's other customers are paying a 530 portion of the cost of standing by ready to provide delivery service to the customer with 531 self-generation. The Company is simply attempting to recover the cost of providing 532 service from those who impose the cost on the Company. 533 44. Q. Can you provide an example to illustrate the points raised above? 534 A. Yes. Consider a hypothetical similar to the one discussed in connection with the 535 Distribution Capacity charge. Assume a circuit serves two customers, each with a load 536 (demand) of 2,000 kW. Customer 1 has generation that serves all of its load, and relies 537

on the Company's distribution system in the event of a self-generation outage. Customer

538 2 does not have self-generation. The revenue requirement associated with the 539 distribution system needed to serve the 4,000 kW demand is \$8,000 per month 540 (\$96,000 per year), which generates a demand price of \$2.00 per kW-month. 541 Under the Company's proposed standby capacity approach, Customer 1 and 542 Customer 2 would each pay \$4,000 per month. This approach does not encourage or 543 discourage customer self-generation, but merely seeks to recover the cost of providing 544 delivery service equitably from each customer. 545 Under Mr. Haas' approach, Customer 2 would be responsible for the full 546 \$8,000 of monthly charges although the Utility's revenue requirement associated with 547 serving his load would only be one-half the amount (\$4,000). Customer 1, while 548 necessitating the same investment in delivery systems as Customer 2, would pay nothing 549 unless this customer's generation were to be off-line in a particular month. 550 approach creates a \$4,000 subsidy to be paid by Customer 2 for costs which 551 Customer 1 should be responsible. 552 45. Q. Does the Company oppose self-generation facilities? 553 A. No, it does not. On this point, we agree with Mr. Cooper's rebuttal testimony in 554 Docket No. 00-0802 where he stated: 555 As indicated above, the Company's interests are in a fair and equitable 556 recovery of its delivery costs from each of its customer classes. Again, 557 it is not the Company's intent to alter the economics of self-generation. 558 The Company's only intent is to implement cost-causation and recovery 559 principles. The Company recognizes that, if self-generation customers 560 are obligated to pay costs that they cause, self-generation may not be as 561 attractive as would be the case if they could avoid those costs and get 562 what amounts to free insurance. This does not indicate any problem 563 with the Company's proposal. Rather, it suggests that failure to adopt

564			the Company's proposal would create a false incentive for customers to
565			self-generate, at the expense of those who do not.
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567			VI. <u>Rider PRS</u>
568	46.	Q.	Have you considered IIEC witness Stephens' criticisms of Rider PRS?
569		A.	Yes. The Company has decided to withdraw Rider PRS as originally proposed.
570			Instead, the Company proposes to retain the provisions found in current Section 13 of
571			SC 110 as the substance for Rider PRS.
572	47.	Q.	Does this conclude your prepared rebuttal testimony?
573		A.	Yes it does.